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## HOUSEHOLD CALENDAR



Canning Sweet Corn -- Cream Style Versus Whole-Grain Style

A radio talk by Miss Ruth Van Deman, Bureau of Home Economics, delivered in the Department of Agriculture period of the National Farm and Home Hour, broadcast by a network of 48 associate NBC stations, Thursday, August 1, 1935, Mr. Kenneth Gapen, announcing.

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MR. GAPEN: Well, Miss Van Deman, here we are, all set for another of your Household Calendar talks. Ready?

MISS VAN DEMAN: Yes, sir, ready.

MR. GAPEN: All right, go!

MISS VAN DEMAN: Sounds as though you were starting me off on a race. I refuse to race with anybody or anything on a summer day like this. But I do want to get over a lot of ground today. There's this question of how to can sweet corn that's bothering a lot of people.

The other day we sent a little story about canning corn to the news-papers. We called it "Whole-grain style corn easier to can at home." Almost before it got into print, my telephone rang. An anxious home canner wanted to know whether we meant that she couldn't can her corn cream style any more.

No, we don't mean that. We simply mean that the cream style is more difficult to can at home than the whole-grain style. Here are the facts in the case. Maybe we'd better name this case: "Home canned corn: Cream-style versus whole-grain style." And for expert testimony we can always call on the bacteriologists.

MR. GAPEN: Shall I be judge, Miss Van Deman?

MISS VAN DEMAN: Yes, you'll make a good impartial judge, Mr. Gapen. And we'll let everybody listening in be on the jury.

MR. GAPEN: That's a good idea. Proceed, Miss Van Deman, with the case -- Cream Style versus Whole-Grain Style in Canning Corn at Home.

MISS VAN DEMAN: Very well, I'll address the jury and we'll take cream-style first.

Corn cut from the cob cream style makes a very dense pack. Naturally when you take a sharp knife, and slice off the tops of the kernels on an ear of corn, and then scrape the cob with the back of the knife, you get a soft, thick, pasty substance. Then when you process it in the steam-pressure canner, this happens. The pressure gauge on the canner should register 15 pounds pressure, which means you have a temperature of 250 degrees Fahrenheit inside the canner. But even this intense heat is slow to penetrate the corn inside the containers, especially if they are glass jars. And it is not until you get the corn all through the jars hot enough, and keep it that hot for a long enough time, that you kill the bacteria that may cause it to spoil later.

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The bacteriologists have that all worked out. They know exactly how many degrees of heat it takes for just so many minutes to kill the bacteria in corn and other foods during canning. They run delicate instruments, called thermocouples, down into the jars while they are in the canner, and keep records on how the heat gradually works its way toward the center. If we had television, I'd like to show you how the bacteriologists plot these records into time-temperature curves, because they show in a very clear way what happens inside a jar of corn.

MR. GAPEN: That's what might be called expert testimony, I take it, Miss Van Deman.

MISS VAN DEMAN: Yes, Your Honor. Now I want to explain why canned corn, especially the cream-style corn put up in glass jars, sometimes turns brown. I've had lots of letters complaining about that. One Pennsylvania homemaker wrote: "The corn tastes all right, but I just don't like the way it looks."

She was right, the brown color didn't mean the corn was spoiled. It was just that the intense heat of the canner caramelized the sugar in the corn. You know the way sugar turns brown when you put it over a hot fire and make it into caramel flavoring. Corn canned in glass; is more likely to caramelize and turn brown than if canned in tin. Tin is a better conductor of heat than glass, so you don't have to process your tin cans of corn so long as you do your glass jars. And you can pop your tin cans into cold water as soon as you take them out of the canner. The glass jars have to cool off gradually, so the corn stays hot longer.

There, Mr., beg pardon, "Judge" Gapen, I think we'll rest the case for

canned corn, cream style.

MR. GAPEN: That all sounded very fair and logical to me.

MISS VAN DEMAN: All right, now for the whole grain.

For the whole-grain style, you cook the corn on the cob first, for 4 or 5 minutes. That sets the starch. Then take a sharp knife, and cut off the kernels just as close to the cob as you can without getting tough hulls. Don't scrape the cobs.

Heat up the corn to boiling with half as much boiling water as you have corn, by weight. Add sugar and salt to season, and pack the corn boiling hot into the containers. Put the glass jars or tin cans at once into the steam pressure canner, and process them at 10 pounds pressure, or 240 degrees, for the number of minutes your time-table says.

With this whole-grain pack, the liquid circulates more freely through the corn, and it heats up more quickly at the center of the containers. Miss Stienbarger, our canning specialist, believes that there would be fewer spoiled jars of home-canned corn if everybody used the whole-grain method.

MR. GAPEN: More expert testimony, eh!

MISS VAN DEMAN: Yes, Your Honor. And there I'll rest the case for

the whole-grain style today.

MR. GAPEN: Very well, Miss Van Deman. Of course any member of the listening jury is free to ask Miss Van Deman questions. Just address your letters to her at the Bureau of Home Economics, U. S. Department of Agriculture, Washington, D. C.

And thank you, Miss Van Deman -- we'll be looking for you next week.